

Put to the test: science communication in crisis situations

Reviewed Book

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Reviewed by

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Abstract

Risk and crisis situations can put science communication to the test, but systematic approaches to science communication in relation to crisis communication are still missing. “*Science communication in times of crisis*”, edited by Pascal Hohaus and published in 2022, is about this relationship. The book review provides an overview, a summary, and a short criticism of this edited volume. As will be outlined, while the book is a valuable contribution to the field, its overall aims could have been more strongly tied together.

Keywords

Risk communication; Science and media; Science communication: theory and models

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An overview

Some say that risk and crisis situations such as climate change or COVID-19 put science communication, its models, and practice to the test [e.g., Weingart, van Schalkwyk & Guenther, 2022]. An edited volume, bringing together different perspectives on communication in a “crisis society” [Frandsen & Johansen, 2017, p. 17] is thus set to be a valuable contribution to the field of science communication, and this is exactly what “*Science communication in times of crisis*”, edited by Pascal Hohaus in 2022, is. The volume contains nine chapters across 219 pages. Twelve authors from different regions contributed their — both theoretical and empirical — interdisciplinary ideas and insights on science communication in crisis situations. The book, thereby, tries to systematically describe how science communication and crisis communication relate. Overarching, the book aims to be inclusive in terms of disciplines, paradigms, methods (e.g., corpus linguistics, discourse analysis, rhetoric, news values analysis), data (e.g., newspaper headlines, tweets, glossaries), nations, languages (e.g., English, Arabic, German), and cultures, as well as contexts (e.g., climate change, COVID-19).

The book is volume 96 in the “Discourse Approaches to Politics, Society and Culture” series. Currently, it is available as hardcover and e-book. Target audiences are set to be scholars and students from linguistics, communication research, political science, sociology, and philosophy of science.

A summary

The introduction (chapter 1) sets the scene by laying out the context of the edited volume and provides short summaries of each contribution. The next eight chapters focus on science communication in times of crisis in more detail.

Chapter 2 [Böhnert & Reszke, 2022] deals with fact-checking and plausibility assessments. The central take-away message for science communicators is that when knowledge is still being negotiated, one should rather focus on plausibility assessments, which overcome a binary choice between true and false. Such plausibility assessments are subject-dependent: they only appear as plausible for certain individuals. The central role of trust with regards to such assessments is also outlined. Hence, “although facts are necessary in science communication, they are not sufficient” [Böhnert & Reszke, 2022, p. 15].

Chapters 3 to 5 look closely at the use of language. Chapter 3 [Syfert, 2022] deals with rhetorical strategies applied in two open letters by the non-profit science advocacy organization “Union of Concerned Scientists”, and finds that they can be interpreted mainly according to political leanings. Focusing on terminology, chapter 4 [Bowker, 2022] adds to this by looking at linguistic examples from Canada’s “Glossary of the COVID-19 pandemic” as an example of expert to non-expert communication, and chapter 5 [Haddad, 2022] considers metaphor- and culture-based neologisms created in Arabic, English, and Spanish in the context of COVID-19. The study confirms that English coined many neologisms in other languages (such as coronapocalypse and zoom-bombing), although each language also had its own neologisms to describe new realities.

Chapter 6 [El-Dakhs, 2022] compares persuasive strategies of the Saudi Arabian and Australian government to motivate people to get vaccinated via tweets, while chapter 7 [Molek-Kozakowska & Struchkova, 2022] looks at journalistic pieces of three Polish media outlets, and their news values during the AstraZeneca controversy, finding that there was an emphasis on risk reporting and sensationalism. The authors also emphasize the tendencies of politicized (as compared to science-topicalized) coverage they observed. In chapter 8 [Koca-Helvacı, 2022], it is shown how the American Alt Right coverage politicized the COVID-19 pandemic, for instance, with respect to in-group and out-group social actors. Finally, in chapter 9 [Callahan & Jensen, 2022], the focus is on the Trump administration and the communication crisis during the pandemic, with the central outcome that political communication clashed with science communication, and that communication efforts by the government fell short of what is needed to effectively communicate during such a crisis.

A criticism

The edited volume, overall, is a useful and relevant contribution to science communication research and practice. Its chapters are concise, informative, comprehensive, and thus, reading the book is a valuable experience. Its focus on

crisis communication in relation to science communication seems unique and spurs welcome reflection on the relationship between these two fields.

However, there are instances where the book could do more to develop exactly this relationship between science communication and crisis communication, including paving a way forward. There are some chapters that aim to do this [e.g., Bowker, 2022; Molek-Kozakowska & Struchkova, 2022]. But, overall, what is lacking is a concluding chapter that brings the individual chapter insights together and provides a higher-level perspective. The reader is left asking: What are the key messages to take away from this book?

A concluding chapter, for example, could have discussed which aspects of science communication are actually linked to crisis communication (or the other way around). While COVID-19 certainly is a social crisis situation, many aspects of climate change are, in my view, actually part of risk communication — which opens another discussion of links between the communication of science, risk, and crisis. It could have been useful to a concluding discussion of the key topics and research questions discussed in the book, including the overlaps and distinctions between science, risk, and crisis communication. More cross-referencing between chapters would have helped the reader to see the bigger picture.

Despite this criticism, “Science communication in times of crisis” is a valuable contribution, and should contribute to advancing and forwarding research and practice in science communication and its interactions with risk and crisis communication.

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